

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/693,419	
		Filing Date	2003-10-23	
		First Named Inventor	WALTON; J. Rodney	
		Art Unit	2467	
		Examiner Name	SMITH, Marcus	
Sheet	1	of	9	Attorney Docket No: 020554

/K.U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f)} (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	001	US5479447	12-26-1995	CHOW; Peter S. et al.	
	002	US5790550	08-04-1998	PEETERS; Johan et al.	
	003	US5822374	10-13-1998	LEVIN; Howard E.	
	004	US6072779	06-06-2000	TZANNES; Marcos et al.	
	005	US6122247	09-19-2000	LEVIN; Howard E. et al.	
	006	US6205410	03-20-2001	CAI; Lujing	
	007	US6222888	04-24-2001	KAO; Chiihsin et al.	
	008	US6330277	12-11-2001	GELBLUM; Ehud Alexander et al.	
	009	US6426971	07-30-2002	WU; Qiang et al.	
	010	US6463290	10-08-2002	STILP; Louis A. et al.	
	011	US6478422	11-12-2002	HANSEN; Richard Arvid	
	012	US6510184	01-21-2003	OKAMURA; Yusaku	
	013	US6631121	10-07-2003	YOON; Sung-Hoon	
	014	US6744811	06-01-2004	KANTSCHUK; Amir	
	015	US6768727	07-27-2004	SOUROUR; Essam et al.	
	016	US6798738	09-28-2004	DO; Sang-Hyun et al.	
	017	US6821535	11-23-2004	NURMI; Juha et al.	
	018	US6891858	05-10-2005	MAHESH; Harihara et al.	
	019	US6927728	08-09-2005	VOOK; Frederick W. et al.	
	020	US6959171	10-25-2005	TSIEN; Chih C. et al.	
	021	US6980601	12-27-2005	JONES; David Charles	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). 2
 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/693,419	
		Filing Date	2003-10-23	
		First Named Inventor	WALTON; J. Rodney	
		Art Unit	2467	
		Examiner Name	SMITH, Marcus	
Sheet	2	of	9	Attorney Docket No: 020554

/K.U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f)} (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	022	US6985534	01-10-2006	MEISTER; Wolfgang	
	023	US7003044	02-21-2006	SUBRAMANIAN; Chandrasekarapuram A. et al.	
	024	US7006848	02-28-2006	LING; Fuyun et al.	
	025	US7039125	05-02-2006	FRIEDMAN; Vladimir	
	026	US7058367	06-06-2006	LUO; Hui et al.	
	027	US7127009	10-24-2006	BERTHET; Antoine et al.	
	028	US7130362	10-31-2006	GIRARDEAU; James et al.	
	029	US7137047	11-14-2006	MITLIN; Vlad et al.	
	030	US7184713	02-27-2007	KADOUS; Tamer et al.	
	031	US7191381	03-13-2007	GESBERT; David J. et al.	
	032	US7274734	09-25-2007	TSATSANIS; Michail	
	033	US7333556	02-19-2008	MALTSEV; Alexander A. et al.	
	034	US7356004	04-08-2008	YANO; Takashi et al.	
	035	US7379492	05-27-2008	HWANG; In Tae	
	036	US7508748	03-24-2009	KADOUS; Tamer	
	037	US7599443	10-06-2009	IONESCU; Dumitru M. et al.	
	038	US20020027951	03-07-2002	GORMLEY; Eamonn et al.	
	039	US20020044610	04-18-2002	JONES; David	
	040	US20020075830	06-20-2002	HARTMAN; David L. Jr.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡
 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. » Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND
 TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
 If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/693,419
		Filing Date	2003-10-23
		First Named Inventor	WALTON; J. Rodney
		Art Unit	2467
		Examiner Name	SMITH, Marcus
Sheet	3	of	9
		Attorney Docket No: 020554	

/K.U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f)} (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	041	US20030003863	01-02-2003	THIELECKE; Jorn et al.	
	042	US20030039317	02-27-2003	TAYLOR; Douglas Hamilton et al.	
	043	US20030185311	10-02-2003	KIM; Yong-Woon	
	044	US20040076224	04-22-2004	ONGGOSANUSI; Eko N. et al.	
	045	US20040120411	06-24-2004	WALTON; Jay Rodney et al.	
	046	US20040151108	08-05-2004	BLASCO CLARET; Jorge Vicente et al.	
	047	US20040151122	08-05-2004	LAU; Kin Nang et al.	
	048	US20040184398	09-23-2004	WALTON; Jay Rod et al.	
	049	US20040252632	12-16-2004	BOURDOUX; Andre et al.	
	050	US20050047515	03-03-2005	WALTON; J. Rodney et al.	
	051	US20050135284	06-23-2005	NANDA; Sanjiv et al.	
	052	US20050135295	06-23-2005	WALTON; Jay Rodney et al.	
	053	US20050135318	06-23-2005	WALTON; Jay Rodney et al.	
	054	US20050147177	07-07-2005	SEO; Dong-Youn et al.	
	055	US20050185575	08-25-2005	HANSEN; Christopher J. et al.	
	056	US20050220211	10-06-2005	SHIM; Dong-Hee et al.	
	057	US20050276343	12-15-2005	JONES; David Charles	
	058	US20060018395	01-26-2006	TZANNES; Marcos C.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡
 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. § Kind of document by
 the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. » Applicant is to place a check mark here if English language
 Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file
 (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete,
 including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments
 on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent
 and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND
 TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/693,419	
		Filing Date	2003-10-23	
		First Named Inventor	WALTON; J. Rodney	
		Art Unit	2467	
		Examiner Name	SMITH, Marcus	
Sheet	4	of	9	Attorney Docket No: 020554

/K.U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f)} (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	059	US20060067417	03-30-2006	PARK; Chang-Soon et al.	
	060	US20060159120	07-20-2006	KIM; Joonsuk	
	061	US20060209894	09-21-2006	TZANNES; Marcos et al.	
	062	US20060209937	09-21-2006	TANAKA; Yoshinori et al.	
	063	US20080069015	03-20-2008	WALTON; J. Rodney et al.	
	064	US20080267098	10-30-2008	WALTON; J. Rodney et al.	
	065	US20080267138	10-30-2008	WALTON; J. Rodney et al.	
	066	US20100067401	03-18-2010	MEDVEDEV; Irina et al.	
	067	US20100119001	05-13-2010	WALTON; J. Rodney et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	068	CN1469662	01-21-2004	LG ELECTRONICS INC.	<input checked="" type="checkbox"/>
	069	CN1537371	10-13-2004	MATSUSHITA ELECTRIC IND CO LTD.	<input checked="" type="checkbox"/>
	070	EP0869647A2	10-07-1998	LUCENT TECHNOLOGIES INC [US]	<input type="checkbox"/>
	071	EP1126673A2	08-22-2001	THOMSON LICENSING INC [FR]	<input type="checkbox"/>
	072	EP1137217	09-26-2001	ERICSSON TELEFON AB L M [SE]	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds of Documents of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIFO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known		
				Application Number	10/693,419	
				Filing Date	2003-10-23	
				First Named Inventor	WALTON; J. Rodney	
				Art Unit	2467	
				Examiner Name	SMITH, Marcus	
Sheet	5	of	9	Attorney Docket No: 020554		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
	073	EP1416688A1	05-06-2004	MOTOROLA INC [US]		<input type="checkbox"/>
	074	EP1447934A1	08-18-2004	INST EURECOM G I E [FR]		<input type="checkbox"/>
	075	JP06003956	01-14-1994	SEIKO EPSON CORP.		<input checked="" type="checkbox"/>
	076	JP10303794A	11-13-1998	MITSUBISHI ELECTRIC CORP.		<input checked="" type="checkbox"/>
	077	JP2000078105	03-14-2000	NEC CORP.		<input checked="" type="checkbox"/>
	078	JP2002232943A	08-16-2002	SONY CORP.		<input checked="" type="checkbox"/>
	079	JP2002504283	02-05-2002	AWARE INC.		<input checked="" type="checkbox"/>
	080	JP2003198442	07-11-2003	HITACHI LTD., et al.		<input checked="" type="checkbox"/>
	081	JP2004266586	09-24-2004	HITACHI LTD.		<input checked="" type="checkbox"/>
	082	JP2004297172	10-21-2004	SHARP CORP.		<input checked="" type="checkbox"/>
	083	JP2004535694	11-25-2004	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	084	JP2005519520	06-30-2005	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	085	JP2006504372	02-02-2006	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	086	KR200011799	02-25-2000	SAMSUNG ELECTRONICS CO LTD [KR]		<input checked="" type="checkbox"/>
	087	KR20010098861	11-08-2001	NEC CORPORATION., et al.		<input checked="" type="checkbox"/>
	088	KR20030085040	11-01-2003	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	089	RU2139633	10-10-1999	SAMSUNG ELECTRONICS CO., LTD.		<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIFO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including drawing, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/693,419
				Filing Date	2003-10-23
				First Named Inventor	WALTON; J. Rodney
				Art Unit	2467
				Examiner Name	SMITH, Marcus
Sheet	6	of	9	Attorney Docket No: 020554	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	090	RU2197781C2	01-27-2003	OLIVETTI TELEMEDIA SPA [IT]		<input type="checkbox"/>
	091	TW545006B	08-01-2003	WORLDSPACE MAN CORP [US]		<input checked="" type="checkbox"/>
	092	TW583842B	04-11-2004	KONINKL PHILIPS ELECTRONICS NV [NL]		<input checked="" type="checkbox"/>
	093	TWI230525	04-01-2005	QUALCOMM INCORPORATED.		<input type="checkbox"/>
	094	WO02093784A1	11-21-2002	QUALCOMM INC [US]		<input type="checkbox"/>
	095	WO03010994A1	02-06-2003	NEXO [FR], et al.		<input type="checkbox"/>
	096	WO03075479	09-12-2003	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	097	WO04038986	05-06-2004	QUALCOMM INCORPORATED,US.		<input type="checkbox"/>
	098	WO05041515	05-06-2005	QUALCOMM INC.		<input type="checkbox"/>
	099	WO05043855	05-12-2005	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	100	WO2004038985A2	05-06-2004	QUALCOMM INC [US]		<input type="checkbox"/>
	101	WO2005046113A2	05-19-2005	ATHEROS COMM INC [US], et al.		<input type="checkbox"/>
	102	WO86007223	12-04-1986	TELEBIT CORPORATION.		<input type="checkbox"/>
	103	WO9307684A1	04-15-1993	SIXTEL SPA [IT]		<input type="checkbox"/>
	104	WO9507578	03-16-1995	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	105	WO9736377A1	10-02-1997	MOTOROLA INC [US]		<input type="checkbox"/>
	106	WO9857472	12-17-1998	AWARE INC [US]		<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/693,419	
		Filing Date	2003-10-23	
		First Named Inventor	WALTON; J. Rodney	
		Art Unit	2467	
		Examiner Name	SMITH, Marcus	
Sheet	7	of	9	Attorney Docket No: 020554

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	107	WO99014878	03-25-1999	QUALCOMM INCORPORATED.	

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T2
	108	GRUNHEID, R. et al., "Adaptive Modulation and Multiple Access for the OFDM Transmission Technique," Wireless Personal Communications 13: 5/13/2000, 2000 Kluwer Academic Publishers, pp. 4-13, XP000894156.			<input type="checkbox"/>
	109	LE GOFF, S. ET AL: "Turbo-codes and high spectral efficiency modulation," IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, 1994. ICC '94, SUPERCOMM/ICC '94, CONFERENCE RECORD, 'SERVING HUMANITY THROUGH COMMUNICATIONS.' pp. 645-649, vol. 2, 1-5 MAY 1994, XP010126658, doi: 10.1109/ICC.1994.3688804.			<input type="checkbox"/>
	110	Office Action dated August 13, 2008 for Australian Application Serial No. 2004223374, 2 pages.			<input type="checkbox"/>
	111	Office Action dated June 27, 2008 for Chinese Application Serial No.200480011307.6, 3 pages.			<input type="checkbox"/>
	112	SONG, Bong-Gee et al., "Prefilter design using the singular value decomposition for MIMO equalization," 1996 Conference Record of the Thirtieth Asilomar Conference on SIGNALS, SYSTEMS AND COMPUTERS, vol. 1, pp. 34-38, 3-6 November 1996, XP010231388, DOI : 10.1109/ACSSC.1996.600812, page 35, column 2, paragraph 4 through page 36, column 1.			<input type="checkbox"/>
	113	VOOK F W et al., "Adaptive antennas for OFDM", Vehicular Technology Conference, vol. 1, 18 May 1998 (1998-05-18), - 21 May 1998 (1998-05-21), pages 606-610, XP010287858, NEW YORK, NY, USA, IEEE, US DOI: 10.1109/VETEC.1998.686646 ISBN: 978-0-7803-4320-7.			<input type="checkbox"/>
	114	WYGLINSKI, Alexander. "Physical Layer Loading Algorithms for Indoor Wireless Multicarrier Systems," Thesis Paper, McGill University, Montreal, Canada, November			<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ** Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/693,419	
		Filing Date	2003-10-23	
		First Named Inventor	WALTON; J. Rodney	
		Art Unit	2467	
		Examiner Name	SMITH, Marcus	
Sheet	8	of	9	Attorney Docket No: 020554

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
		2004, page 109.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/693,419
		Filing Date	2003-10-23
		First Named Inventor	WALTON; J. Rodney
		Art Unit	2467
		Examiner Name	SMITH, Marcus
Sheet	9	of	9
		Attorney Docket No: 020554	

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

- ☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

- ☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- ☐ See attached certification statement.
- ☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- ☒ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kenyon S. Jenckes/	Date (YYYY-MM-DD)	2011-12-02
Name/Print	Kenyon S. Jenckes	Registration Number	41,873

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**